

## Claims

1. A gear drive unit (10), in particular for adjusting moving parts in the motor vehicle, having a rotor shaft (18), which is supported in a housing (16) and is braced axially on the housing (16) via at least one face end (50), and a separate toothed element (32) for transmitting torque to a gear component (38, 40) is secured to the rotor shaft (18), characterized in that the toothed element (32) has an axial bearing face (48), which rests on one of the face ends (50) of the rotor shaft (18).
2. The gear drive unit (10) as defined by claim 1, characterized in that the axial bearing face (48) is located on a bottom face (46) of a bore (44) in the toothed element (32).
3. The gear drive unit (10) as defined by one of claims 1 or 2, characterized in that the toothed element (32) has an axial bracing face (60), by way of which the rotor shaft (18) is braced on the housing (16) - in particular on an adjusting element (64).
4. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that the axial bracing face (60) has a radius (59) and is embodied in particular as a spherical surface (58).
5. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that a through opening (52) is integrally formed onto the bottom face (46) of the bore (44) and in particular receives a ball (56) that has the bracing face (60).
6. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that the rotor shaft (18) has a radial bump (74) - in particular knurling (75) or a serration (76) - in an axial portion (78), which bump, upon introduction into the bore (44) of the toothed element (32), forms a force- and/or form-locking connection that is fixed against relative rotation.

7. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that in the axial region (78) of the radial bump (74) of the rotor shaft (18) - in particular at the end next to the bottom face (46) - the bore (44) has a lesser inside diameter (86) than in regions (84) of the rotor shaft (18) that are without radial bumps.

8. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that the rotor shaft (18), after the integral forming on of the radial bump (74), is through-ground, and can be axially mounted through a bearing sleeve (28) in the housing (16).

9. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that the connection of the rotor shaft (18) to the toothed element (32) in the region (78, 96) having the radial bump (74, 73) is embodied as a press fit, and in the region (84) without radial bumps, it is embodied as a clearance fit.

10. The gear drive unit (10) as defined by one of the foregoing claims, characterized in that the toothed element (32) has a worm gear (34), a cone wheel toothing, or a straight or oblique pinion toothing, which meshes with a further gear element (40, 38).